

What is claimed is:

1. A method for guiding an intersection, comprising the steps of:

checking an intersection network to create a predetermined intersection based on a vehicle position information;

creating a turn guide arrow to be displayed on the intersection; and

simultaneously displaying the intersection and the turn guide arrow created thereon.

2. The method of claim 1, wherein the step of creating the predetermined intersection comprises the steps of:

calculating an approaching angle of an approach road that the vehicle approaches, departing angles of a difference of departing roads connected to the approach road, and angles between the approach road and the difference of departing roads from a predetermined set direction;

vertically placing the approach road; and

representing the difference of departing roads according to the calculated angles between the approach road and the departing roads from the approach road placed vertically.

3. The method of claim 2, further comprising the step of storing the approaching angle, the departing angle, and the angles between the approach road and the departing roads.

4. The method of claim 2, wherein the difference of departing roads are represented according to a trigonometric function value calculated using a trigonometric function table.

5. The method of claim 1, wherein the step of creating the turn guide arrow comprises the steps of:

arranging a basic arrow, the basic arrow providing with a lower body, a center circle, an upper body and a head;

if a vehicle is guided by selecting one of the departing roads, calculating a rotation angle by using the angle between the approach road and the selected departing road; and

rotating the upper body and the head according to the calculated rotation angle.

6. The method of claim 3, wherein the rotation angle is an angle obtained by subtracting  $180^\circ$  from the angle between the approach road and the selected departing road..

7. The method of claim 3, further comprising the step of

converting the rotation angle into a positive number.

8. The method of claim 6, wherein  $360^\circ$  is added to the rotation angle if the rotation angle is a negative number.

9. The method of claim 4, further comprising the step of matching a center of the rotated arrow with a center of the intersection.

10. An apparatus for guiding an intersection, comprising:  
means for checking an intersection network to create a predetermined intersection based on a vehicle position information;

means for create a turn guide arrow to be displayed on the intersection; and

means for simultaneously displaying the intersection and the turn guide arrow created thereon.

11. The apparatus of claim 10, wherein the means for generating the intersection comprises:

means for calculating an approaching angle of an approach road which the vehicle approaches, a departing angle of a difference of departing roads connected to the approach road, and

angles between the approach road and the difference of departing roads from a predetermined set direction;

means for vertically placing the approach road; and

means for representing the difference of departing roads according to the calculated angles between the approach road and the departing roads from the approach road placed vertically.

12. The apparatus of claim 10, further comprising a means for storing the approaching angle, the departing angle, and the angles between the approach road and the departing road.

13. The apparatus of claim 10, wherein the means for creating the turn guide arrow comprises:

means for arranging a basic arrow, the basic arrow being providing with a lower body, a center circle, an upper body and a head;

means for calculating a rotation angle by using the angle between the approach road and a selected departing road if the vehicle is guided by selecting one of the departing roads; and

means for rotating the upper body and the head according to the calculated rotation angle.

14. The apparatus of claim 13, wherein the rotation angle

is an angle obtained by subtracting  $180^\circ$  from the angle between the approach road and the selected departing road.

15. The apparatus of claim 13, further comprising a means for converting the rotation angle into a positive number.

16. The apparatus of claim 15, wherein  $360^\circ$  is added to the rotation angle if the rotation angle is a negative number.

17. The apparatus of claim 13, further comprising the means for matching a center of the rotated arrow with a center of the intersection.

18. A navigation system comprising:  
means for storing data necessary to create an intersection;  
means for storing a basic arrow data;  
a memory storing a coordinate of an arrow for indicating a direction and a trigonometric function table;

a central processing unit for guiding an intersection with a turn guide arrow by using the data necessary to create the intersection, the basic arrow data and the trigonometric function table; and

means for displaying the intersection with the turn guide

arrow, wherein the central processing unit includes:

means for checking an intersection network to create a predetermined intersection based on a vehicle position information, the vehicle position information being extracted from the data necessary to create the intersection; and

means for creating the turn guide arrow to be displayed on the created intersection.

19. The navigation system of claim 18, wherein the means for storing the basic arrow data includes a lower body, a center circle, an upper body and a head, whose line widths are adjustable, and colors distinguishing the lower body, the center circle, the upper body and the head from each other.